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Knowledge, Attitude and Practice on Oral & Personal Hygiene among the Government Secondary School Students of District Yamunanagar, Haryana

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Abstract

Introduction: Personal hygiene is a public health tool that plays a very important role for disease prevention and health promotion in individuals, families and communities. Poor practice of knowledge and attitudes to personal hygiene such as hand washing play major roles in the high incidence of communicable diseases and therefore has negative consequences for a child's long term overall development**. Methodology**: A cross sectional study was carried out to assess the knowledge attitude and practice on oral and personal hygiene among 392 Government school students of district Yamunanagar (Haryana) by using self-administered questionnaire technique. Data was entered and analyzed using SPSS version 21. The study mainly focused on to assess the knowledge, attitude and practicing behavior of students in regards to hand washing, bathing, tooth brushing, clothing and taking care of nail and hair. **Results**: Hands washing before and after meal was found to be almost similar. 80% students wore clean clothes as well as cleaned their ears regularly. About 84 % used to brush their teeth daily. Mean ± SD values about Hand washing practice were (4.38 ± 0.07). Pearson Co-relation showed that habits related to cleanliness of hand (0.516^{**}) were positively significant at the 0.01 level (2-tailed). Mean ± SD value of cleanliness of ears and eyes among students were (4.3 ± 0.9). The correlation revealed significant positive linear correlations between knowledge-attitude ($r=0.423$, $p<0.001$) knowledge-practice ($r=0.423$, $p<0.001$) and attitude-practice ($r=0.170$, $p<0.001$). **Conclusio**n: Majority of the students was practicing hygiene except for teeth, nail and bath hygiene. Periodical personal hygiene education and monitoring are needed for school students to promote hygienic practices.

Keywords: Knowledge, Hand washing, Poor personal hygiene

1. Introduction

Personal hygiene is an essential public health tool that plays a vital role in disease prevention and health promotion among individuals, families, and communities. It can be improved through health education and awareness, encouraging individuals to adopt proper cleanliness practices. Hygiene at the community level reduces the burden of communicable diseases and improves population health (Winslow, 1920). Poor hygiene contributes significantly to diseases such as diarrhoea, typhoid, dysentery, gastroenteritis, hepatitis A, intestinal worm infections, and malaria. These diseases continue to cause morbidity, malnutrition, and mortality among children in developing countries. Intestinal parasites are particularly

common among school-age children and are associated with poor cognitive development and impaired physical growth (Nokes et al., 1992). Hand hygiene is a key component of personal hygiene, as hands are a primary route of transmission for infections. They frequently come into contact with the mouth, nose, eyes, food, and water. Poor hand hygiene is strongly associated with gastrointestinal infections (WHO, 1996). Proper handwashing with soap can significantly reduce diarrhoeal and respiratory diseases (White et al., 2008). However, global handwashing rates remain low due to lack of access to water, soap, and sanitation facilities (GHWD, 2009; Oswald et al., 2008).

Schools are important platforms for promoting hygiene practices, as they help develop lifelong healthy However, many schools in India lack adequate sanitation facilities. Only a small proportion have access to clean water, toilets, and separate sanitation facilities for girls, which negatively affects hygiene practices and school attendance (WHO, 2009; Rama, 2008; Ministry of Human Resource Development, Government of India, 2004). Oral hygiene is another important aspect of personal hygiene. Poor oral health leads to dental caries, gum diseases, and tooth loss, affecting nutrition, physical appearance, and quality of life. These conditions are closely related to lifestyle factors and limited access to dental care (Kwan et al., 2005). Promoting oral hygiene through regular brushing and dental check-ups is essential.

Historically, the importance of hygiene has been emphasized in public health. Florence Nightingale highlighted the relationship between cleanliness and disease prevention, noting that poor living conditions increase susceptibility to infections (Hog, 1995). Modern public health continues to recognize hygiene as a key preventive strategy. Personal hygiene includes body hygiene, oral hygiene, hand hygiene, domestic hygiene, and environmental sanitation. Diseases are often transmitted through the faeco-oral route, where pathogens from human excreta spread via contaminated hands, food, water, and surfaces (Encyclopedia, 2009). Good hygiene practices can break this chain of transmission and reduce disease burden.

In India, children in rural and lower socio-economic groups are more vulnerable to hygiene-related diseases due to lack of awareness, limited access to healthcare, and poor sanitation facilities (Census, 2011). Health education programs in schools, including deworming and hygiene promotion, are essential to address these challenges (SSHE Global Symposium, 2004; Ministry of Rural Development, 2008).

In conclusion, personal hygiene is a cost-effective and essential strategy for preventing communicable diseases and improving child health. Strengthening school-based hygiene education and improving sanitation infrastructure can significantly reduce morbidity and promote overall well-being among children (Aiello et al., 2008; Ilika et al., 2002; Luby et al., 2005). Staying healthy and clean is a basic human need. It is important to have knowledge and healthy habits to ensure better health from the school age onwards. This will ensure to keep better health and promote healthy behavior in aspects relevant to human life. This will also prevent diseases, injuries and other health conditions and result in better academic and other achievement. After assessing the level of knowledge and practices of personal hygiene at school level we will be able to frame better health programmers for educational set up.

Objectives

- To assess the knowledge, attitude and practice related to oral and personal hygiene among the senior secondary students
- To determine the association of practice with demographic variables among the students.
- To find the correlation between practice and its various aspects among the students.

Methods

Study design: A cross-sectional design was used.
Study method: Quantitative method of data collection was adopted as a study method.
Study area: Government Secondary Schools of District -Yamunanagar, Haryana.
Study population: Government Secondary School students of District- Yamunanagar and data was collected in year 2017.
Sampling Frame: The study was conducted in Government Secondary schools of district Yamunanagar, Haryana. Total population of district Yamunanagar was1214162 according to Census 2011. Total population of Government Secondary school going students of 9^{th}& 10^{th} standard was 18930 respectively.
Sampling Unit:

Individual students of 9^{th} and 10^{th} class of Government Secondary School, District Yamunanagar, Haryana

Sample Size Calculation:

$$n = \frac{NZ^2\, p\,(1-p)}{d^2\,(N-1) + z^2 p\,(1-p)}$$

n = Sample size

Z = Standards normal deviation with 95% confidence interval i.e. 1.96

d= (allowable error) = 5% = .05

Total population of students of class 9^{th} and 10^{th} = 18930

Govt. School going students (9^{th}& 10^{th}) = 50 %

P= 0.50

Therefore,

$$n = \frac{18930 \times 1.96^2 \times 0.5 \times 0.5}{0.0025 \times 1829 + 1.96^2 \times 0.5 \times 0.5}$$

=377

Assuming 5% non-response rate, total sample size will be 377 + 14.4 = 392 (approximate)

Sampling Technique

The study adopted multistage random sampling technique. After proportionate sampling 26 schools were selected from five blocks and by using systemic sampling technique 7/8 student was selected from grade IX and X . Government Secondary Schools of district, Yamunanagar.

Sample Specification

Students of 9th and 10th class who were present during data collection and willing to participate were included, while those who were absent, not willing to participate, or suffering from any disease or injury were excluded.

Conflict of Interest

The authors declare that there is no conflict of interest regarding this study.

Results

This study was conducted in 49 Government Secondary and Senior Secondary schools in district Yamunanagar. Total 392 students were included in the study. This chapter contains descriptive and inferential statistical analysis of the knowledge, attitude and practice on oral and personal hygiene among the government school students.

Section A: Demographical Characteristics of the Respondents

Table 1: Demographic profile of the respondents

S. No.	Profile	Frequency	Percentage
1.	Age (years)		
	<14	55	14.03
	14	135	34.9
	15	120	31.0
	>15	81	20.9
	Total	392	100.0
2.	Gender		
	Male	215	54.9
	Female	177	45.1
4.	Type of family		
	Nuclear	303	77.3
	Joint	89	22.7
5.	Religion		
	Sikh	28	7.1
	Hindu	307	78.3
	Muslim	57	14.6
6.	Occupation of father		
	Agriculture/Own business	371	94.7
	Government Employed	21	5.3
7.	Occupation of mother		
	Unemployed/Housewife	365	93.1
	Employed	27	6.9
	Total	392	100.0
8.	Monthly income	27	6.9

	<=5000		
	5000-10000	173	44.1
	10000-15000	142	36.2
	15000-20000	41	10.5
	>20000	9	2.3
	Total	392	100.0
9.	**Residency** (Rural)	303	77.3
	(Urban)	89	22.7

In the present study, students from the age group of 14 years to 15 years participated and proportion of males and females were included. Most of the children (65.9%) were in the age group of 14-15, rest of the students was either below or above 15 yrs. Of the 392 students, 77.3% hailed from nuclear family. 94.7% students' father' were Farmers/businessmen and mothers (93.1%) were housewives/unemployed. In the study sample, 78.3% students were Hindu, followed by 14.6% Muslim and 7.1% Sikh. About 77.73% students were from rural area and 22.7% from urban area.

Section B: Knowledge and practice of Respondents about personal hygiene.

Table 2: Distribution of students according to aspects related to knowledge about personal hygiene

Aspects	Frequency	Percentage
Source of information		
Books	88	22.4
Media	167	42.6
Parents	18	4.6
School teachers	119	30.4
With whom students feel comfortable while discussing their health and hygiene related problems		
Mother	267	68.1
Father	63	16.0
Sister	24	6.1
Brother	15	3.8
Friends	23	5.8
Total	392	100.0

Above Table shows that 68.1% students were aware of personal hygiene through mother, 42.6% through media, 30.4% through school teacher and least, 4.6% students were aware of personal hygiene through parents. It is evident that most of the students felt comfortable in discussing their health and hygiene related problems with their mother.

Table 3 Knowledge regarding personal and oral hygiene:

		Frequency	Percent
1.Taking Bath is important for Personal Hygiene	No	59	15.0
	Yes	333	85.0
2. Do you Know about oral and personal hygiene	No	64	16.3
	Yes	328	83.7
3. Brushing prevent tooth decay	No	63	16.0
	Yes	329	84.0
4. Know method to prevent gum disease	No	133	34.0
	Yes	259	66.0
5. Is it good for hygiene to wash hand before and after meal	No	17	4.3
	Yes	375	95.7
6. Cleanness of ear and eyes is a part of personal hygiene	No	98	25.0
	Yes	294	75.0

This Table shows majority of the participants (84%) knew that cleaning of teeth can prevent tooth decay, whereas and only16.3% reported that brushing does not prevent tooth decay. About (83.7%) students were aware of oral and personal hygiene and (66%) were aware of methods to prevent gum diseases.

Table 4 Level of knowledge among respondents (N=392)

		Frequency	Percent
Knowledge level score (N=392)	Poor (0-1)	2	0.5
	Average (2-4)	113	28.8
	Good (5-6)	277	70.6
	Total	392	100.0

As indicated above, majority 277 (70.6 %) of respondents had revealed good knowledge while113 (28.8 %) had shown average knowledge and mean and SD =4.9+_1.13.

Table 5: Practices related to bathing among students

S. No.	**Bathing**		**Frequency**	**Percentage**
1.	How many times do student bathe	Daily	347	88.5
		Every alternate days	33	8.4
		Twice a day	12	3.1
2.	How do you take bath	Body wash	40	10.2
		Soap and water	334	85.2
		Water	18	4.6
3.	How often you wash your hair	Daily	169	43.1
		Every alternate days	84	21.4
		Twice a day	27	6.9

		Once in a week	112	28.6
4.	With what thing you wash your hair	Shampoo	241	61.5
		Shampoo and conditioner	111	28.3
		Soap	40	10.2
		Total	392	100.0
5.	Do you use towel after bathing personal	Yes	365	93.1
		No	27	6.9

In the present study, it was found that 88.5% students used to take bath regularly, 8.4% students every alternate day and 3.1% used to take bath twice a day. 88.5% students used soap and water for bathing, followed by 4.6% used only water and 10.2% used body wash for bathing. Further, 43.1% used to wash their hairs daily, 21.4 % used to wash their hairs every alternate day and 28.5% once a week. Mean± SD values of bathing were (4.4 ± 0.64).

Table 6: Practices related to oral hygiene among the students

Sr. No.	**Teeth cleaning**		**Frequency**	**Percentage**
1.	How many times do students brush their teeth?	Daily	332	84.7
		Every alternate day	16	4.0
		Twice a day	44	11.3
2.	How do brush your teeth?	tooth paste	374	95.5
		By Datun	13	3.3
		By rock salt	5	1.2
3.	When do you change your brush?	Every month.	259	66.0
		Every 3month.	125	31.9
		More than 6months	8	2.1
4.	When did students visit their dentist last time?	6 months ago	109	27.8
		Last 10-12 months	80	20.4
		Last 1-5 years	31	8.0
		More than 5 years	172	43.8
5.	For how long do students brush their teeth?	One minute	81	20.6
		Two minutes	195	49.8
		Less than one minute	16	4.0
		More than two minutes	100	25.5
6.	Method to prevent gum diseases?	Avoiding sweets and sticky food	89	22.7
		Mouth rinse after meal	259	66.0
		Flossing	5	1.2

		Don't know	39	10.1
7.	Do you clean your tongue?	Yes	364	93
		No	28	7
8.	How do you clean your tongue?	Tongue cleaner	179	46.3
		Fingers	23	5.9
		Tooth brush	168	43.4
		Any other	17	4.4

In the present study it was found that mean and SD =4.7±1.4 and 84% used to brush their teeth daily followed by 11.3% twice a day and 4% students used to brush their teeth every alternate day. Of the total students, 85% used tooth paste while 3% used neem stick and 1% used rock salt to brush their teeth. It was found that 66% students changed their brush every month, every 3months is 39% followed by 8% every 6 months. It was found that 43% students had not visited the dentist in more than 5 years; about 49% students bushed their teeth for 2 minutes followed by 25% for more than 2 minutes and 4 % for less than 1 minute. Around 66% children rinse the mouth after meals to prevent gum diseases. About 46% of children did use the tongue cleaner for cleansing their tongue, and 6% of children used their finger to clean their tongue. Mean ± SD values of the teeth cleaning among the students were (4.7 ± 1.4).

Table 7: Practices of students about Hand washing

Sr. No.	**Hand washing**		**Frequency**	**Percentage**
1.	How do you wash your hands?	Water	54	13.7
		Water and soap	331	85.5
		Mud and water	5	1.3
		Ash	2	.5
2.	Do you wash your hands before meal?	Yes	375	95.6
		No	17	4.4
	Do you wash your hands after meal?	Yes	375	95.6
		No	17	4.4
3.	Do you wash your hands after using latrine?	Yes	390	99.5
		No	2	.5
4.	Do you wash your hands after handling shoes?	Yes	390	99.5
		No	2	.5
5.	What is the student's practice while coughing or sneezing?	Cover with hand	116	30.0
		Cover with handkerchief	266	67.4
		Don't cover mouth	10	2.6

6.	Do you wash your hands after coughing/sneezing?	Yes	337	85.8
		No	55	14.2

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In the present study it was found that 85% students used soap and water for hand washing while 1% used mud and water and 13% used only water. About 95% students washed their hands before meal, 99% washed their hands after using latrine and 99% after handling shoes. 67% students covered their mouth with hanker chief, 30% with hand and 3% didn't cover their mouth. 85% students washed their hands after coughing or sneezing. About 78% students trimmed their nails regularly. Mean ± SD values about Hand washing were (4.3 ± 0.7).

Table 8: Clothe related practices of students

S. No.	Practices about clothes	Yes/No	Frequency	Percentage
1.	Do you wear clean clothes?	Yes	309	78.6
		No	83	21.4
2.	Do you wear clean and ironed school uniform every day?	Yes	309	78.6
		No	83	21.4
	Mean ± SD		4.3 ± 0.9	

In the present study it was found that 78% students wore clean clothes, 21% wear unclean clothes and 78% student wore clean and ironed uniform every day.

Table 9: Practices related to cleanliness of ears, eyes and nails among students

Sr. No.	Practices related to ears and eyes	Answers	Frequency	Percentage
1.	Do you clean your ears?	Yes	358	92.5
		No	34	7.5
2.	How do you clean your eyes?	Water	299	77.3
		Water and soap	93	22.7
3.	When did you trim your nail?	Once in a week	236	61.0
		Sometimes	156	39.0
	Mean ± SD		4.3 ± 0.9	

In this study about 61% students trimmed their nails once in a week and about 39% sometimes. In the present study it was found that 92% students clean their ear regularly. It was further found that 77% students clean their eyes regularly.

Table 10: Attitude of students towards oral and personal hygiene:

	True/False	**Frequency**	**Percent**
Personal and oral hygiene are important for healthy living?	True	13	3.3
	False	379	96.7
	Total	392	100.0

Above Table shows that 379 (96.7 %) students believed that personal and oral hygiene are important for healthy living. This indicated that most of them had favorable attitude towards oral and personal hygiene.

Table 11: Distribution of respondents according to their practices related to oral and personal hygiene:

Habits	Frequency	Percentage
Poor(0-6)	0	0
Fair(6-16)	107	27.3
Good(17-22)	285	72.7

Table 12. Correlation between Knowledge, attitude and practices:

**. Correlation is highly significant at the 0.01 level (2-tailed).

Variables	**Correlation Coefficient(r)**	**P Value**
Knowledge, Practice	0.423	.001**
Knowledge, Attitude	0.186	.001**
Attitude, Practice	0.170	.001**

The correlation revealed highly significant positive linear correlations between knowledge-attitude ($r=0.423$, $p<0.001$) knowledge-practice ($r=0.423$, $p<0.001$) and attitude-practice ($r=0.170$, $p<0.001$).

Table 4.1.14: Mean personal hygiene score of students according to their demographic profile

S. No.	**Demographic profile**	**N**	**Mean**	**SD**	**Test value**	**Df**	**p-value**
1.	Age(years)						
		N			F=7.130	388	0.000
	<14	51	18.35	1.707			
	14	135	17.93	1.798			
	15	120	17.40	1.968			
	>15	86	16.94	2.384			
2.	Monthly income						

	<=5000	27	15.19	2.354	F=12.254	387	0.000
	5000-10000	168	17.75	1.860			
	10000-15000	142	17.73	1.931			
	15000-20000	46	18.22	1.710			
	>20000	9	17.67	2.062			
3.	Gender						
	Male	215	17.46	2.016	t- 0.401	390	0.689
	Female	177	17.74	2.022			
4.	Type of family						
	Nuclear	298	17.55	2.041	t -1.105	390	0.270
	Joint	94	17.82	1.951			
5.	Religion						
	Sikh	28	17.54	2.365	F-0.98	390	.400
	Hindu	307	17.56	2.077			
	Muslim	57	17.95	1.469			
6.	Occupation of Father						
	Agriculture/Own Business	371	17.61	2.018	t-.152	390	0.880
	Government employee	21	17.69	2.182			
7.	Occupation of Mother						
	Unemployed/House wife	365	17.63	2.032	t-.811	390	0.418
	Employed	27	17.27	1.856			
8.	**Residency** (Rural)	303	17.70	1.983	t - 1.647	390	0 .100
	(Urban)	89	17.30	2.129			

*Statistically significant at P<0.05 **Statistically highly significant at P<0.01

As shown in the above Table of ANOVA analysis, relationships of the practice regarding oral and personal hygiene were found highly significant with Age of respondent students (f=71.30.p<0.00) and Monthly income(f=12.54, p<0.00) of the respondent students, however the Occupation of father and occupation of mother were no found significant.

Discussion

The current study was carried out to assess knowledge, attitude and practice regarding personal and oral hygiene among 9th & 10th students of Government Secondary Schools of district Yamuananagar , Haryana. Total 392 students were interviewed and data was collected with the help of structured questionnaire. In this study majority of student, 78% were Hindu, 14% Muslim and 7% were Sikh, whereas in a similar

study (Motakpalli et al, 2013) on school children, 45% belonged to Hindu and 40% of children belonged to class II of socio-economic classification.

The current study revealed that bathing is treated as one of the basic required practice for ensuring the regular cleanliness and proper hygiene practice. Regarding the practices, the students when asked about different aspects of bathing, majority, almost 88% students reported that they took regular bath, while only 8% students used to take bath in every alternate days and 3% students used to take bath twice a day. The results are similar to that of (Vismita et al, 2014) who conducted a similar study and found that 91% students used to take bath regularly and 7% students used every alternate day and 2% sometime. The current study revealed that, 10% students used to take bathe with body wash and 85% students used to bathe with soap and water, whereas, it was found that only 5% students bathe with water only. This result slightly differed with similar study of (Prisma et al, 2004) conducted on school students that found 95% of the students used to take bath with soap and water, 13% students used only water.

In current study it was found that 84% of the students used to brush once in a day, 11% used to brush their teeth twice and only 4% students used to brush their teeth every alternate day. Kenneth et al, 2008 conducted study on school children revealed that in Switzerland, Sweden, Netherlands, Germany, Denmark and Norway more than 75% brushed more than once per day, There was good awareness among the children regarding the importance of regular tooth brushing for caries prevention (84%); this finding is similar to that in the study of (Varenne et al,2006).The current study revealed that 66% students replaced their tooth brush once in a month, while 32% changed their tooth brush after 3 month. (Manjunath et al, 2013) conducted study on school children observed that 27% students change their tooth brush every 2 months.

In the present study 49% students used to take two minute to brush their teeth and 20% one minutes and 25% more than two minute to brush their teeth whereas 4% students took less than one minute. (Mahmoud et al, 2005) conducted study on school children showing that about 71% of the students took at least two minutes to brush their teeth while 15% took less than one minute.

The study revealed that 27% students visited dentist in 6 months ago, 8% in last 1-5 years, 20% in the last 6-12 months and 43% students visited dentist before 5 years ago. In a similar study, (Mahmoud K et al, 2005) found that approximately 60% of the students had visited the dentist during the last year.

In response to the question that do you wash hands before meals, 95% of the respondents reported washing of their hands before and after meal, whereas only 4% of students mentioned that they did not wash their hands before and after meal. In the study by (Vivas AP et al, 2010) it was found that, 99% of students washed their hands before meal. Regarding hand washing after using toilet it was found that 99% of the students used to practice washing their hands properly after using the toilet or after defecation and only 2% students mentioned that they could not practice it due to their ignorance or lack of willingness. (Lopez-Quinrero et al, 2009) in their study in Colombia reported that 82.5% of students washed their hands after using the toilet, whereas, (Vivas AP et al, 2010) study in Ethiopia revealed that, 15% students washed after defecation. This may be due to cultural implication.

As to the question that how students washed their hands, 85% students reported that they washed the hands properly with soap and water and 13% students mentioned that they practiced the hand washing, with water only. As we know that hand washing with soap is the simplest cost effective health prevention

technique; it was reassuring to observe this hand washing behaviour in majority of our students. Also, adequate hand hygiene is great deterrent to the spread of gastro intestinal and respiratory tract infections especially in children. (Vivas AP et al, 2010) reported that only 36.2% students did hand washing using soap.

The current study found that 61 % of the students trimmed their nails regularly. The nails work as the agent to transmit the germs to mouth and into the body through hands. (Motakpalli et al, 2013) conducted study in a similar study on school children found10% of the students with dirt in their nails.

The study revealed that 79% students mentioned that they wore clean clothes and only 21% students wore unclean clothes. (Vivas AP et al ,2010) reported that only 12% of the students did not wash or change their clothes regularly.

The current study found that 78% students daily wore ironed school uniform, whereas 21% of did not. Oyibo PG et al (2013) conducted on school children found 37% students wash their uniform daily and wore ironed school uniform daily. The study by Ahmadu BU et al (2013) had found 3% students had dirty uniform.

In this study, 90% students cleaned their ears frequently and 7% students did not clean. In a similar study by Motakpalli et al (2013) on school children revealed that 25% students with unclean external or internal ear of which 60% students had impact wax and 3% students had discharge. In present study, 77% of the students washed their eyes with water while 23% students wash their eyes with water and soap. Regarding socio-demographic variables, age and income seem affect the knowledge, attitude and practice in significance.

The correlation revealed highly significant positive linear correlations between knowledge-attitude ($r=0.423$, $p<0.001$), knowledge-practice ($r=0.423$, $p<0.001$) and attitude-practice ($r=0.170$, $p<0.001$). The positive linear correlations indicated that as the knowledge is increased the attitude becomes favorable as well as practice becomes better. Similarly, when attitude is increased the practice becomes better. Therefore, efforts must be put in to enhance knowledge which positively influences attitude and practice among the school children for prevention and management of oral and communicable diseases.

About 66% children cited that gum problems can be prevented by rinsing mouth after meals, avoiding sweets and sticky foods, whereas other prevention technique like flossing, and regular dental visit were lesser known. These results indicated that improvement in knowledge toward learning proper brushing technique is needed. Interventions to increase the knowledge, regular visit to the dentist, subsequent use of flossing are essential and are in argument with other studies.

Conclusion

The purpose of the study was to explore and describe the knowledge attitude and practices of oral and personal hygiene among students of Govt. Secondary School, district-Yamunanagar, Haryana possesses and the practices of hygiene being observed. An overwhelming majority of the survey respondents had high knowledge, favourable attitude and sound practice with respect to oral and personal hygiene. Age and income seemed to have a direct relationship with all the three variables, knowledge, attitude and

practice. The study result shows a positive linear correlation between knowledge attitude and practices so there is a need for health education regarding personal and oral hygiene for the school students for better awareness and developing a good attitude and behaviour. The main source of information to students regarding hygiene was found to be from their mother. Most of the students used to take bath regularly. The habits related to cleanliness of hand were found more positively correlated as compared to clothes, ears and eyes and teeth. Majority of the students were practicing hygienic methods except hair wash, nail & oral hygiene.

Recommendations

The recommendations are addressed for the consideration when planning initiatives for the development of this region of our country. It must be noted that these recommendations for improving hygiene awareness and practices in district Yamuanagar are far short of exhaustive. Future researches with large no. of sample and standard questionnaire may be conducted to high light this problem in the students community so that concrete steps may be suggested to improving hygiene and reducing the spread of diseases. Recommendations on the basis of the present study are appended below, Promotion of hygiene and other health-related issues should be incorporated into the school curriculum. Regular monitoring of hygiene practices should be done by the class teacher. Teachers should be given education so that they can impart knowledge and importance on oral health and its maintenance. Hygiene information campaigns need to be implemented periodically so that the student can be trained in the practice of hygiene and learn the health benefits that will be derived from these practices. Oral health education programs has to be conducted in all the school in large scale, and even parents should also be a part of such educational programs

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